

Lampiran 1: *Test report* uji tarik serat tunggal *Sansivera*

LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

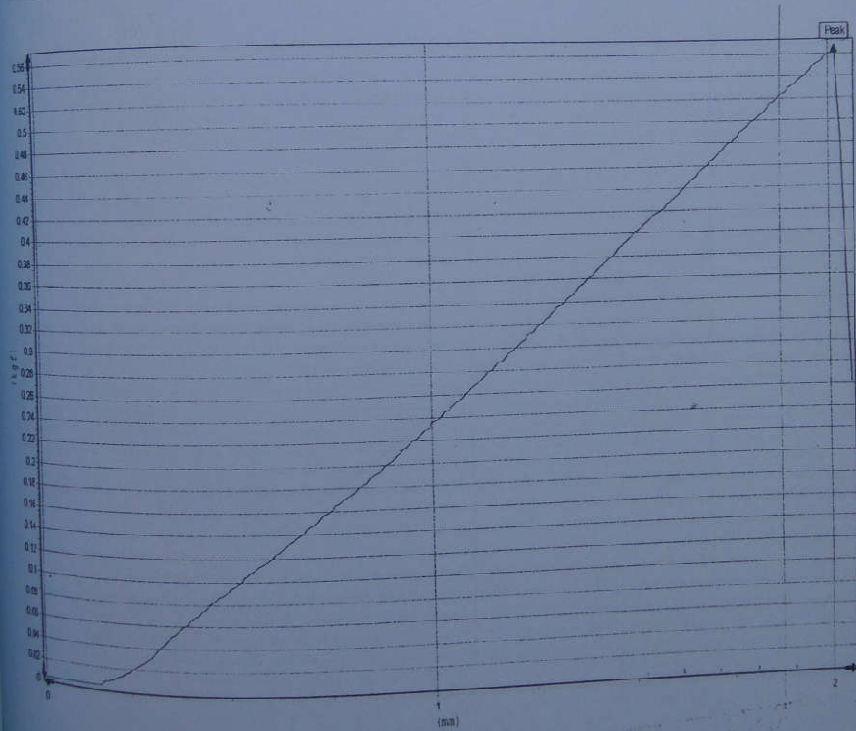
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

TEST REPORT

Test NO. : *01202*

Test Description :

Speciment	Area mm <sup>2</sup>	Max Force N	Tensile Strenght N/mm <sup>2</sup>	Yield Load N	Yield Strenght N/mm <sup>2</sup>	Break Force N	Elong. %
<i>01202</i>		0.56					



Q.C. Dept. :

*[Signature]*

Tester :

*[Signature]*

# LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

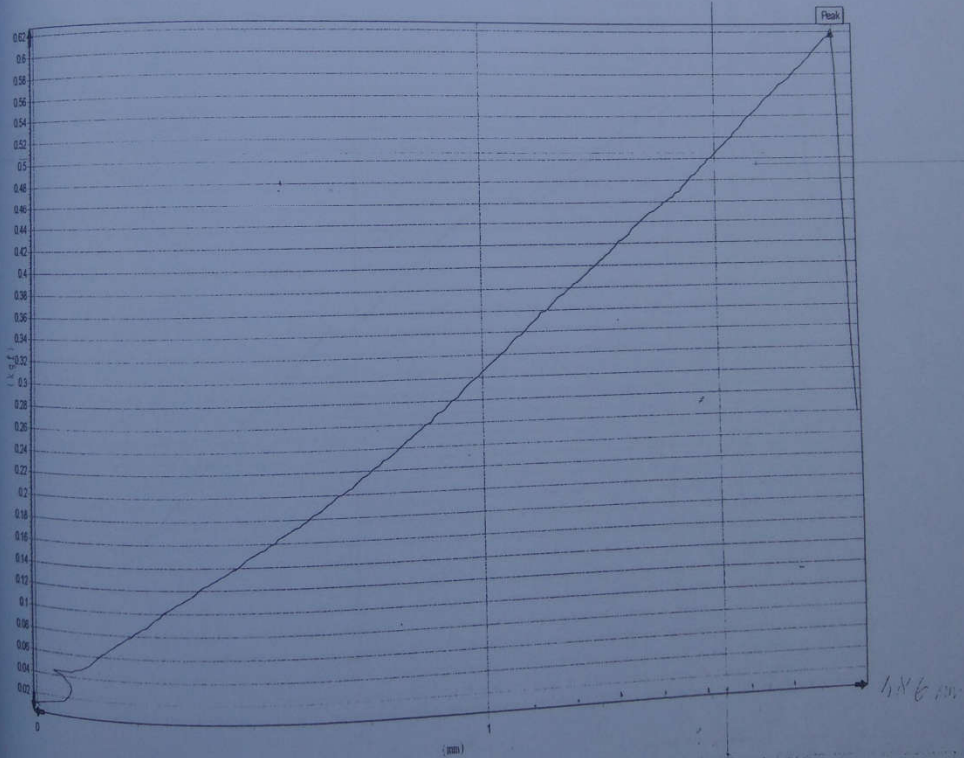
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

## TEST REPORT

Test NO. :

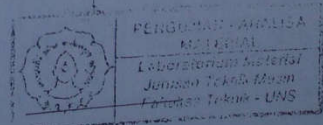
Test Description :

Speciment	Area mm <sup>2</sup>	Max Force N	Tensile Strenght N/mm <sup>2</sup>	Yield Load N	Yield Strenght N/mm <sup>2</sup>	Break Force N	Elong. %
07/13230		0.62					



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LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

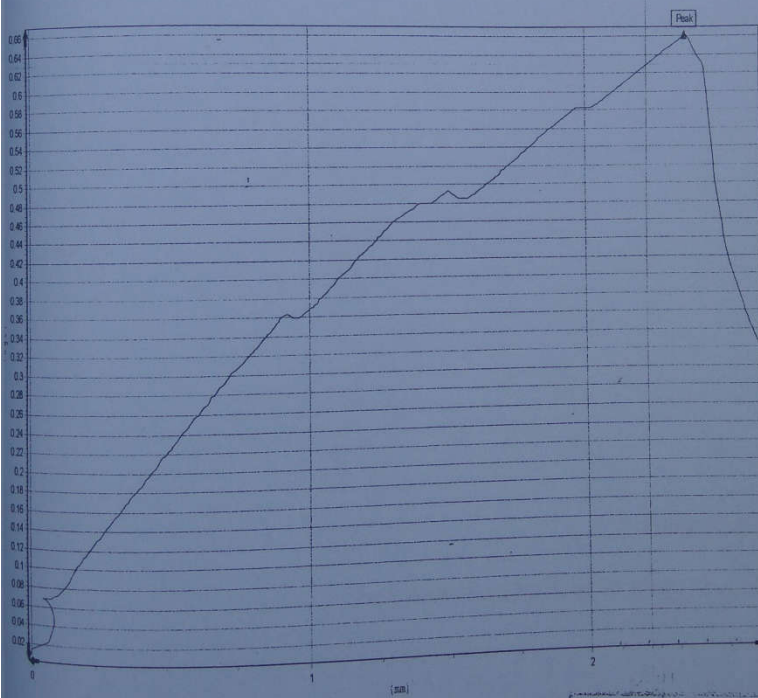
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

TEST REPORT

Test NO. :

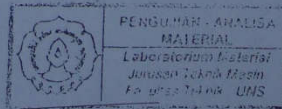
Test Description :

Speciment	Area mm2	Max Force N	Tensile Strenght N/mm2	Yield Load N	Yield Strenght N/mm2	Break Force N	Elong. %
1734		0.66					



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Tester :



Lampiran 2 : *Test report* uji tarik serat tunggal *Agave*

# LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

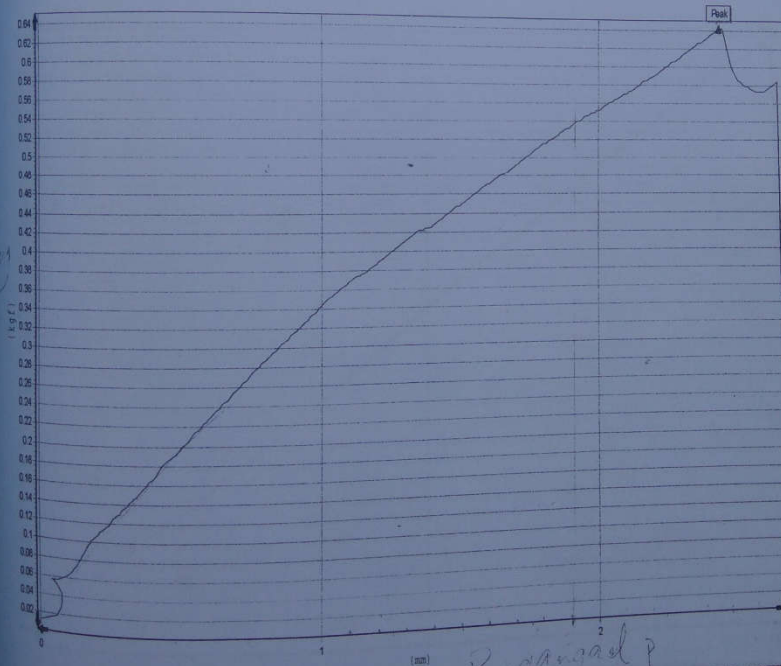
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

## TEST REPORT

Test NO. : *16.10*

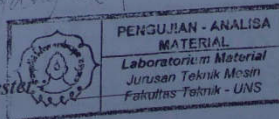
Test Description :

Speciment	Area mm <sup>2</sup>	Max Force N	Tensile Strenght N/mm <sup>2</sup>	Yield Load N	Yield Strenght N/mm <sup>2</sup>	Break Force N	Elong. %
<i>16.10</i>		0.64					



Q.C. Dept. : *Narubi*

Tested by *Rozangad P*



LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

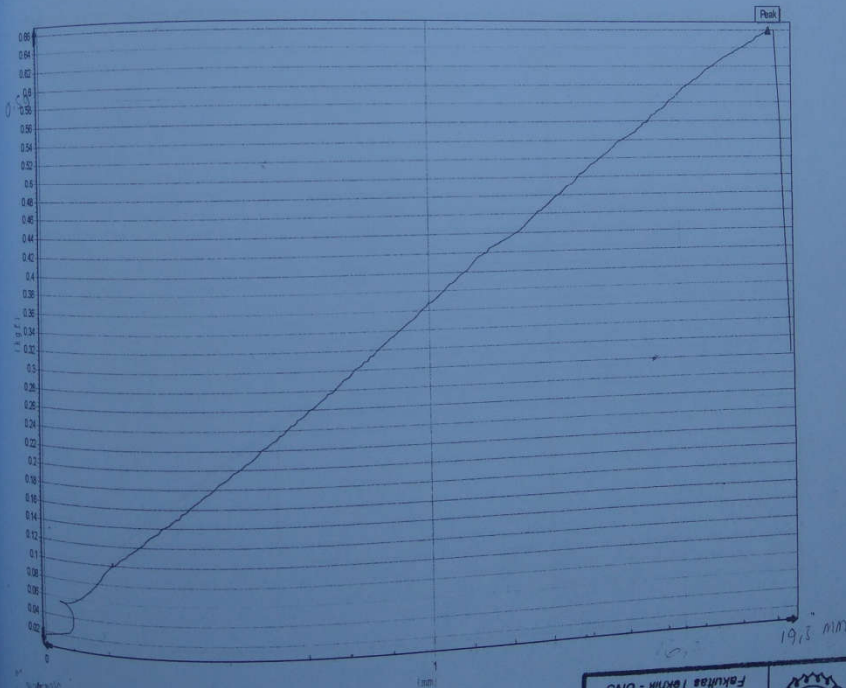
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

TEST REPORT

Test NO. :

Test Description :

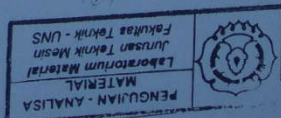
Speciment	Area mm <sup>2</sup>	Max Force N	Tensile Strenght N/mm <sup>2</sup>	Yield Load N	Yield Strenght N/mm <sup>2</sup>	Break Force N	Elong. %
017391		0.66					



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*[Handwritten signature]*

Tester





# LABORATORIUM MATERIAL JURUSAN TEKNIK MESIN FT UNS

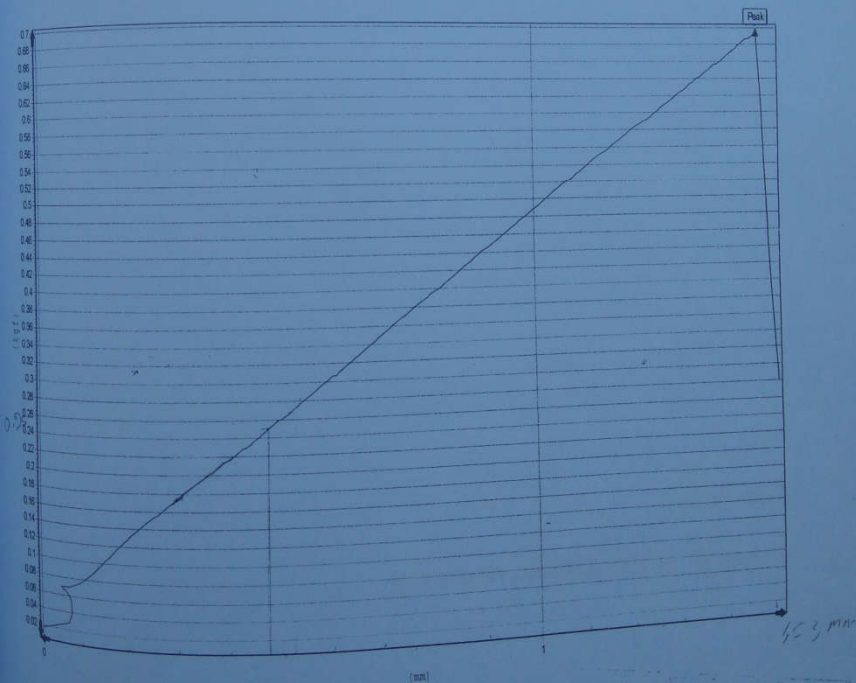
Jl. Ir. Sutami no.36 A Surakarta, Jawa Tengah

## TEST REPORT

Test NO. :

Test Description :

Speciment	Area mm <sup>2</sup>	Max Force N	Tensile Strenght N/mm <sup>2</sup>	Yield Load N	Yield Strenght N/mm <sup>2</sup>	Break Force N	Elong. %
D. 18548		0.69					



Q.C. Dept. :

*Maruto*

Tester : \_\_\_\_\_



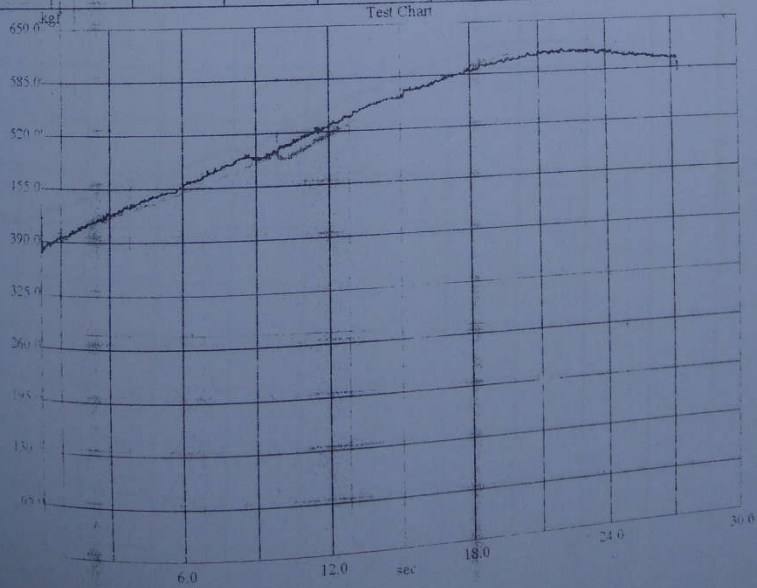
Lampiran 3 : *Test report* uji tarik matrik tanpa serat

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TENSILE TEST REPORT FORM TMN.m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kg/mm <sup>2</sup>	Elongation %
1	115.00	611.76	6.72	7.70
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---	---	---	---	---
Average	115.00	611.76	6.72	7.70

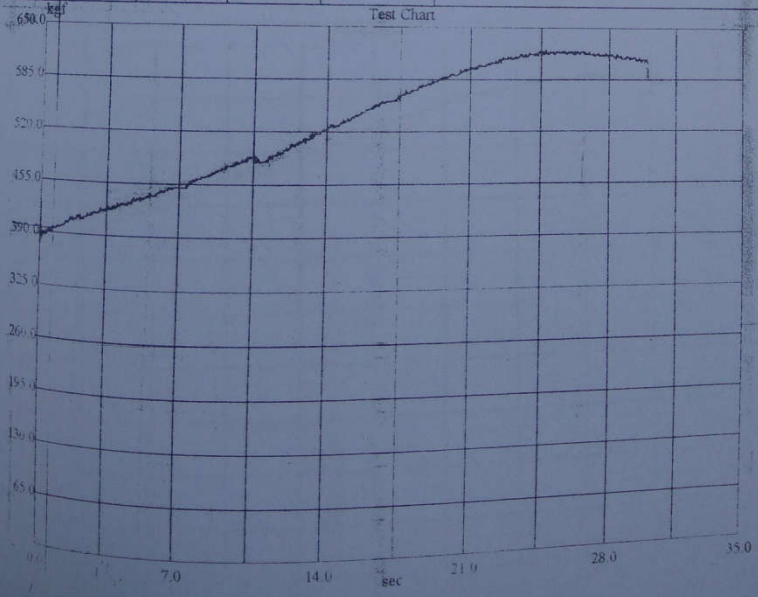


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TENSILE TEST REPORT FORM, TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	620.21	6.82	9.50
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---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
Average	115.00	620.21	6.82	9.50

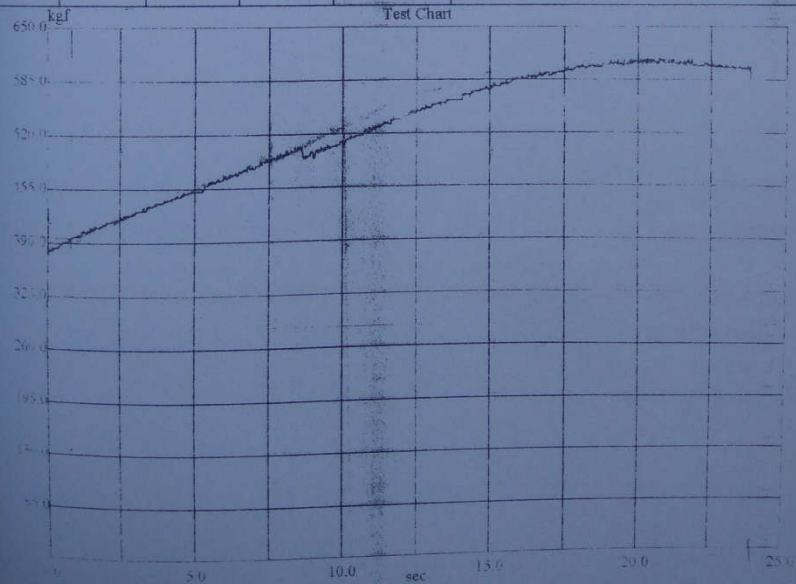


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TENSILE TEST REPORT FORM TMN: m<sup>2</sup>

No	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	608.38	6.69	6.74
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---	---	---	---	---
---	---	---	---	---
Average	115.00	608.38	6.69	6.74



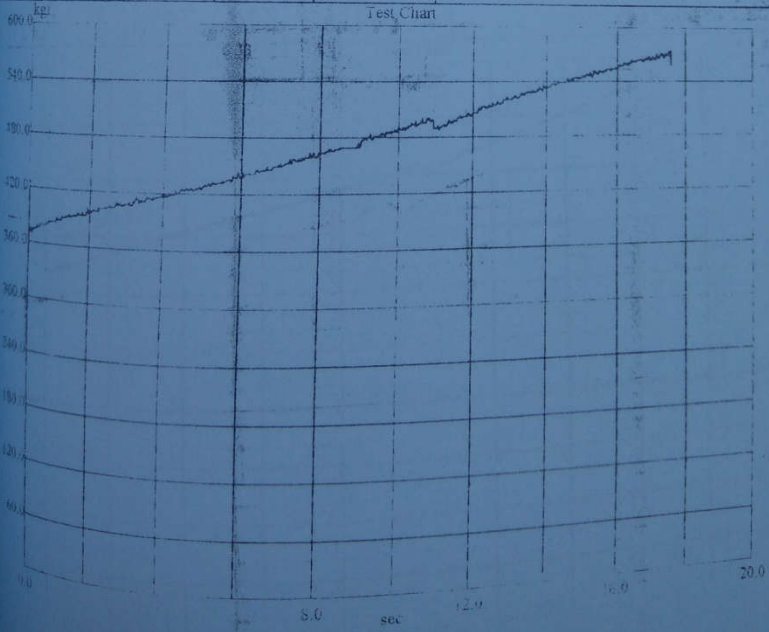
Lampiran 4 : *Test report* uji tarik komposit berpenguat serat *Sansivera* dengan arah serat  $0^{\circ}$

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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	573.73	6.30	5.16
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
Average	115.00	573.73	6.30	5.16



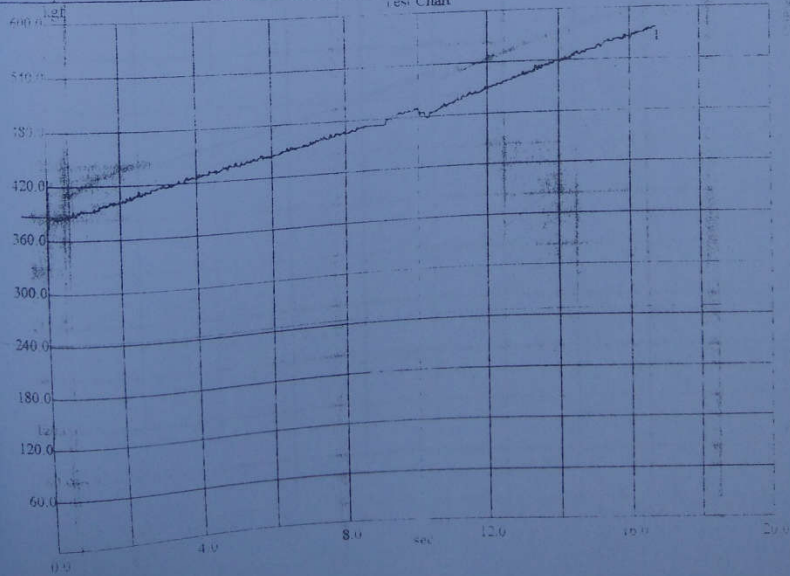
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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	576.27	6.33	1.91
---	---	---	---	---
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---	---	---	---	---
Average	115.00	576.27	6.33	1.91

Test Chart



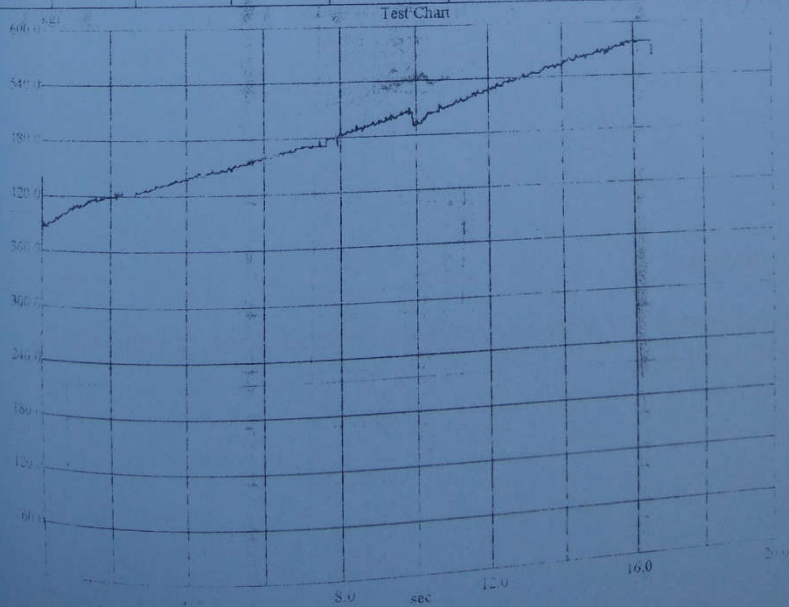


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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	577.96	6.35	4.84
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
Average	115.00	577.96	6.35	4.84



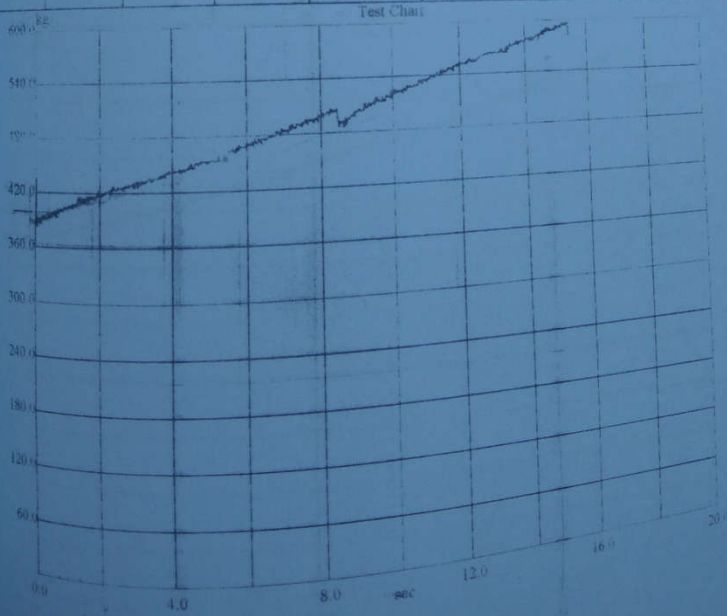
Lampiran 5: *Test report* uji tarik komposit berpenguat serat *Sansivera* dengan arah serat  $0^{\circ}/45^{\circ}$

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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

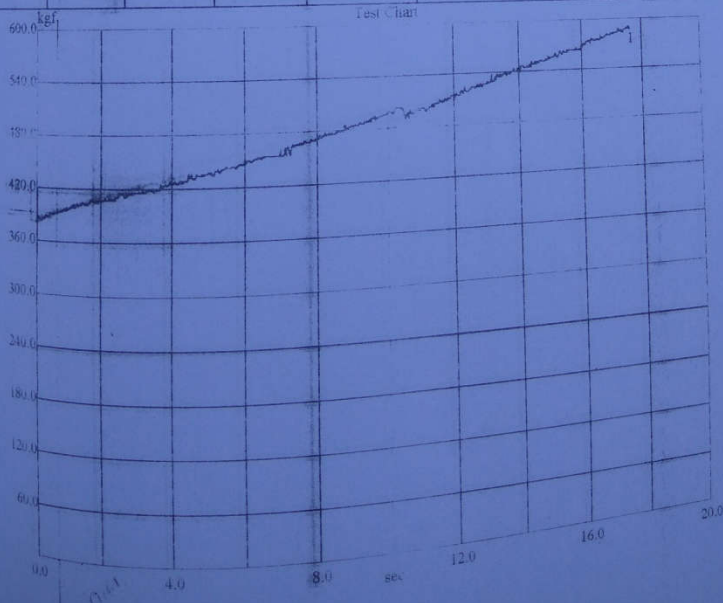
No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	597.39	6.56	4.43
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
Average	115.00	597.39	6.56	4.43



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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	589.79	6.48	5.0 <sup>-</sup>
---	---	---	---	---
---	---	---	---	---
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---	---	---	---	---
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---	---	---	---	---
Average	115.00	589.79	6.48	5.0 <sup>-</sup>



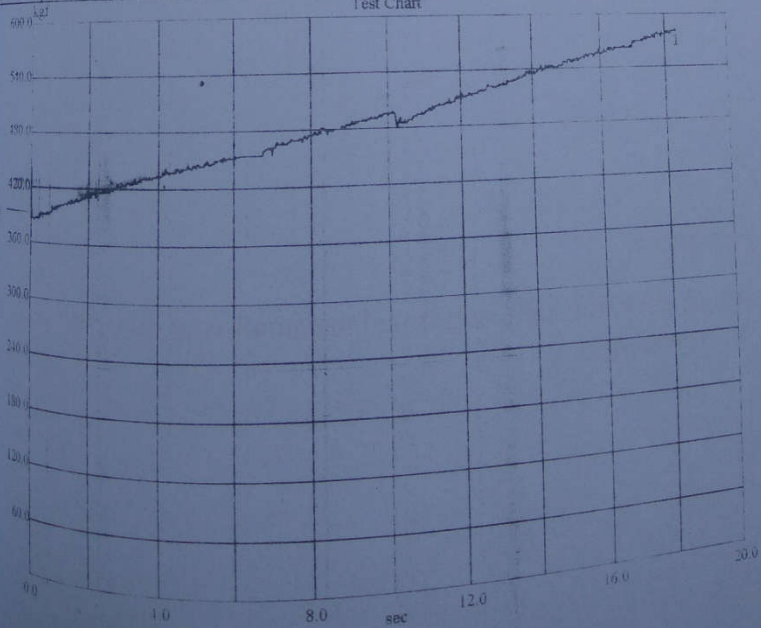
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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	582.18	6.40	5.30
	---	---	---	---
	---	---	---	---
	---	---	---	---
	---	---	---	---
	---	---	---	---
	---	---	---	---
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	---	---	---	---
Average	115.00	582.18	6.40	5.30

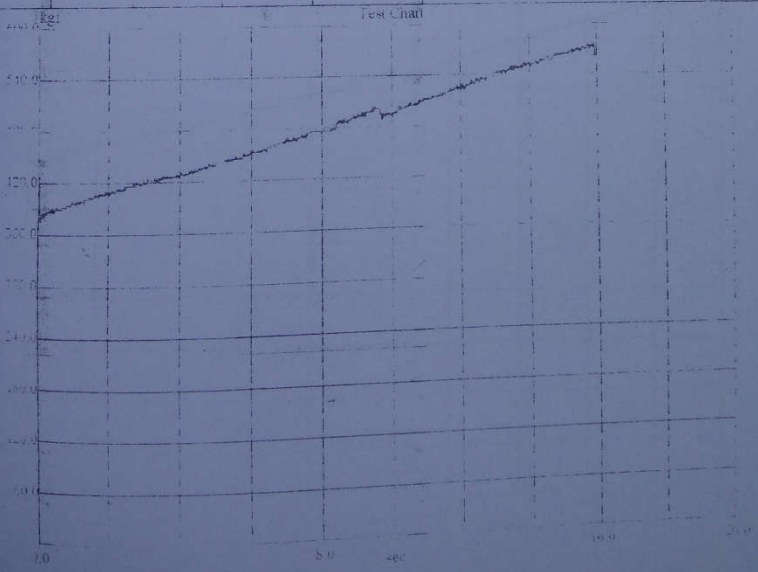
Test Chart



Lampiran 6 : *Test report* uji tarik komposit berpenguat serat *Sansivera* dengan arah serat  $0^{\circ}/90^{\circ}$

TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	576.27	6.33	4.68
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
Average	115.00	576.27	6.33	4.68



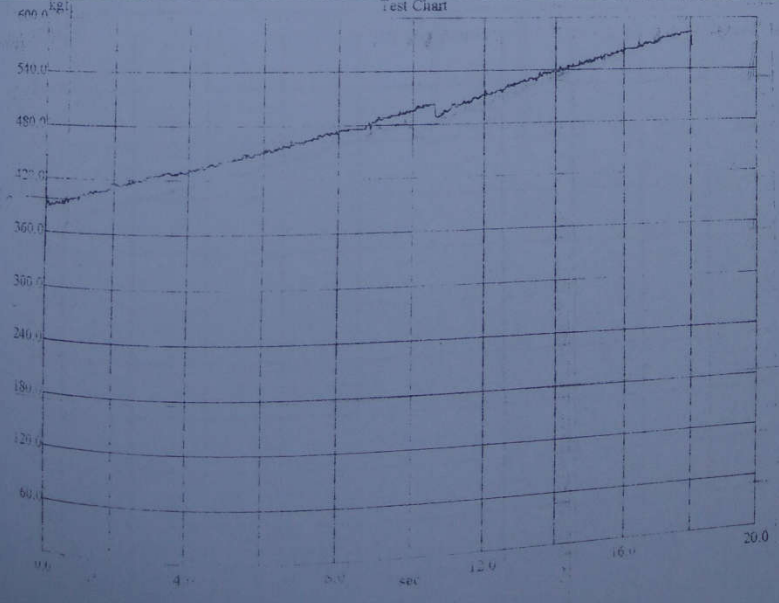


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TENSILE TEST REPORT FORM TMN.m

No.	Length mm	Peak kgf	Peak kg/mm <sup>2</sup>	Elongation %
1	115.00	582.18	6.40	5.32
---	---	---	---	---
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Average	115.00	582.18	6.40	5.32





Lampiran 7 : *Test report* uji tarik komposit berpenguat serat *Agave* dengan arah serat  $0^{\circ}$

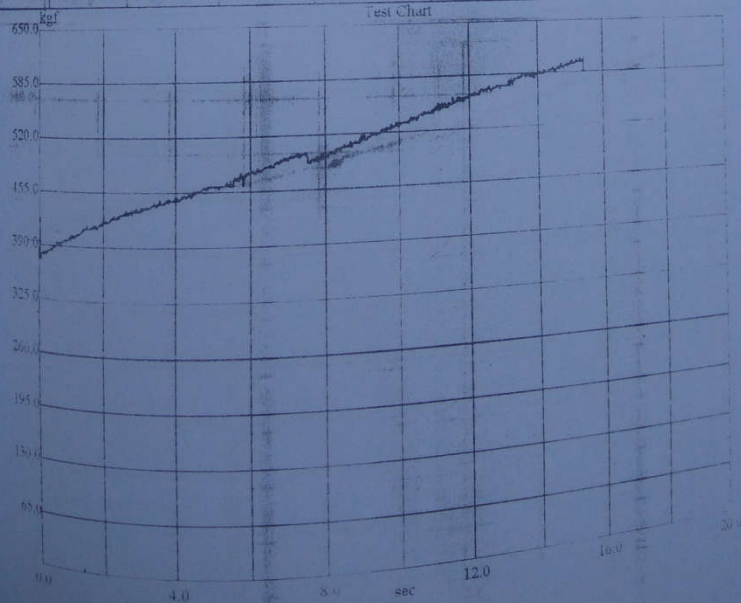


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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kg/mm <sup>2</sup>	Elongation %
1	115.00	602.46	6.62	4.47
---	---	---	---	---
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---	---	---	---	---
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---	---	---	---	---
Average	115.00	602.46	6.62	4.47





Lampiran 8 : *Test report* uji tarik komposit berpenguat serat *Agave* dengan arah serat 0°/45°





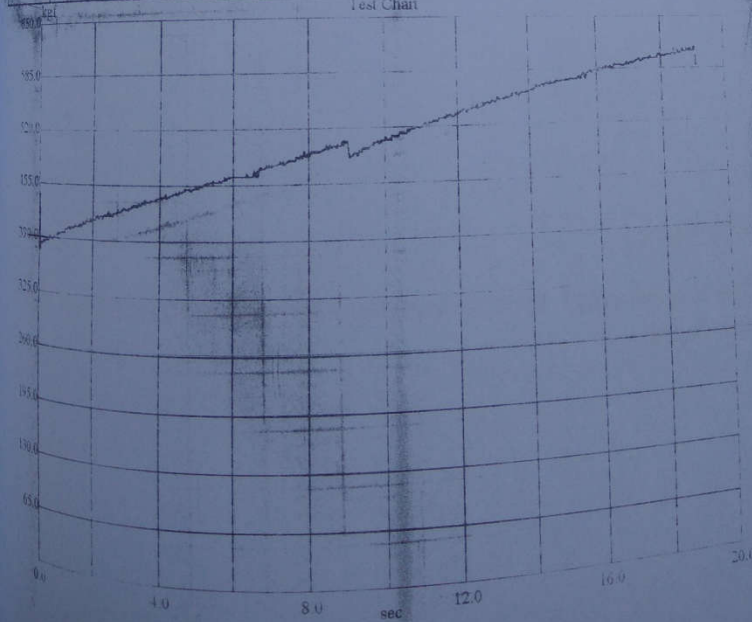




# Balai Latihan Kerja Industri - Surabaya

## TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	610.07	6.70	5.5"
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
Average	115.00	610.07	6.70	5.5"



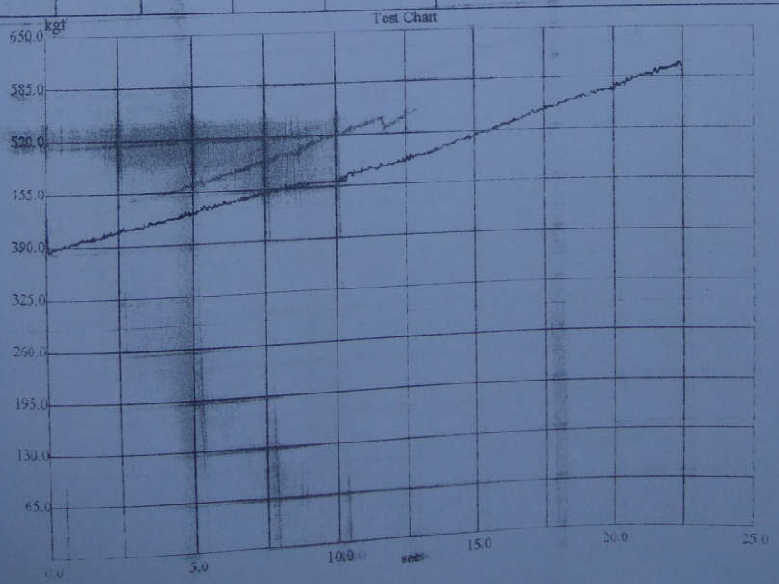
Lampiran 9 : *Test report* uji tarik komposit berpenguat serat *Agave* dengan arah serat  $0^{\circ}/90^{\circ}$

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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No	Length mm	Peak kgf	Peak kg/mm <sup>2</sup>	Elongation %
1	115.00	602.46	6.62	6.48
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
---	---	---	---	---
Average	115.00	602.46	6.62	6.48

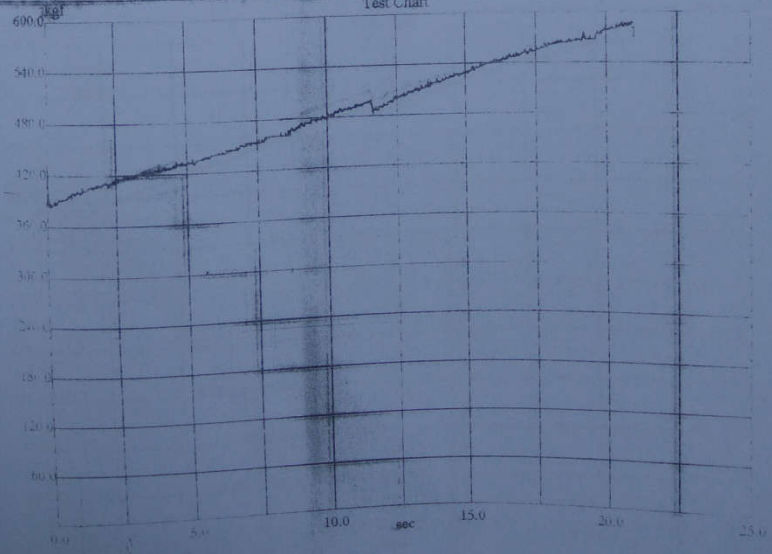


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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length	Peak	Peak	Elongation
	mm	kgf	kgf/mm <sup>2</sup>	%
1	115.00	588.10	6.46	6.02
---	---	---	---	---
---	---	---	---	---
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---	---	---	---	---
---	---	---	---	---
Average	115.00	588.10	6.46	6.02



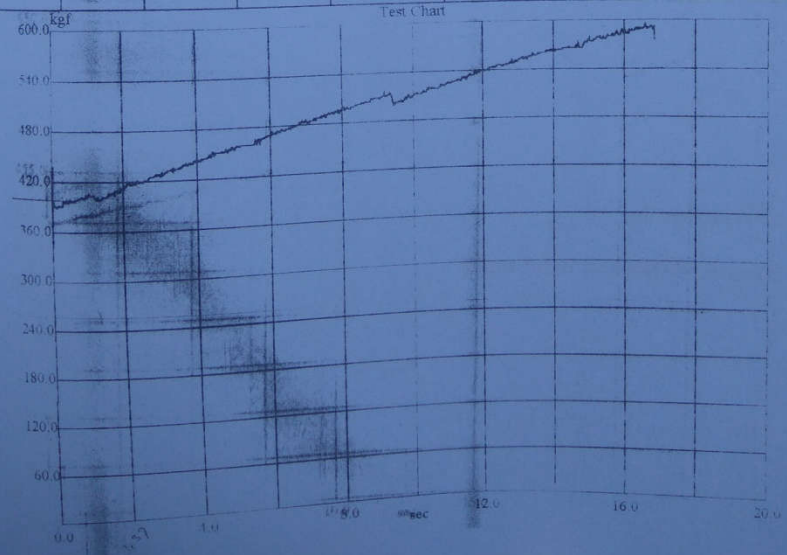


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TENSILE TEST REPORT FORM TMN m<sup>2</sup>

No.	Length mm	Peak kgf	Peak kgf/mm <sup>2</sup>	Elongation %
1	115.00	594.01	6.53	1.80
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---	---	---	---	---
---	---	---	---	---
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---	---	---	---	---
Average	115.00	594.01	6.53	1.80





Lampiran 10 : Data hasil pengujian *impact*

Data hasil Pengujian Impact Charpy Poliestar

	$\alpha$	$\beta$
Sensitivitas 0°	90°	86°
		87°
		87°
		88°
		87°

	$\alpha$	$\beta$
Agave 0°	90°	86
		87
		87
		86
		86

	$\alpha$	$\beta$
Sensitivitas 0/90°	90°	86°
		85°
		87°
		88°
		88°

	$\alpha$	$\beta$
Agave 0/45°	90°	82°
		85°
		83°
		83°
		84°

	$\alpha$	$\beta$
Sensitivitas 0/45°	90°	84°
		85°
		85°
		83°
		85°

	$\alpha$	$\beta$
Agave 0/90°	90°	85°
		86°
		85°
		84°
		87°

	$\alpha$	$\beta$
Tanpa Serat	90°	82°
		82°
		83°
		84°
		82°

